

GNE.3230R1C1

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant	:	Eaton, et al.
Appl. No.	:	10/006867
Filed	:	December 6, 2001
For	:	SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME
Examiner	:	Helms, L.
Group Art Unit	:	1642

**DECLARATION OF J. CHRISTOPHER GRIMALDI UNDER 37 CFR §1.131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, J. Christopher Grimaldi, declare and state as follows:

1. I am a joint inventor of the invention claimed in the above-captioned patent application.
2. During the time period in which all of the events and activities described herein occurred, I was employed by Genentech, Inc., the assignee of the above-captioned application.
3. All of the events and activities described herein were performed by me personally, or by the other joint inventors, as part of our duties as employees of Genentech, Inc.
4. The invention claimed in the above-captioned patent application was conceived and reduced to practice prior to December 29, 1999 in the U.S. as described below.
5. Prior to December 29, 1999, I and the other co-inventors conceived of the invention claimed in the above-captioned patent application, and thereafter reduced the invention to practice, as evidenced by the enclosed copies of pages from my laboratory notebook, LB #33720 and the corresponding electronic file and binder with all of the oligonucleotide sequences. Prior to November 24, 1999, the idea of investigating several newly discovered DNA sequences for their relevance was conceived, including developing primers and analyzing expression of the DNA sequences of interest in normal and tumor tissues. The enclosed laboratory notebook pages 18-19, dated November 24, 1999, shows evidence of conception, in that many of the primers had already been made and that PCR reactions were performed. Page 19 of my laboratory notebook shows the expression of various DNA sequences in a variety of tissue types.
6. After these initial experiments, I continued to produce primers and to identify expression levels of other DNA sequences. The enclosed printed copy of an electronic file shows that many of the primers which had been previously identified were made on

March 6, 2000, including the primers for DNA 26843, the DNA which is relevant to the presently claimed invention. This data shows diligence in reducing to practice following conception of the invention. Thereafter, the primers were tested for expression in various tissues (see the enclosed page 3 from an oligonucleotide binder showing gels dated June 13, 2000). This page shows a series of gels in which the primers were used to determine tissue and tumor expression levels for the various DNA sequences. The levels are shown using a +, -, and +/- to indicate the amount of the specific mRNA which was detected. The expression data for DNA 26843 is shown in row 13 in this series of gels. This data shows that the DNA is amplified in rectal tumors, as compared to normal tissue. Actual reduction to practice therefore occurred on June 13, 2000. Thus, I conceived of the present invention at least as early as November 24, 1999, and was diligent in reducing the invention to practice on June 13, 2000.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information or belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

By: 

J. Christopher Grimaldi

Date: 1/21/2004

# **LABORATORY NOTEBOOK**

**Property of:**

**Genentech, Inc.**

**NOTEBOOK NO.** 33720  
**ISSUED TO** Chris Grimaldi  
**ON** 11/4/99  
**DEPARTMENT** Molecular Biology  
**RETURNED** \_\_\_\_\_

—SCIENTIFIC NOTEBOOK CO.—  
2831 LAWRENCE AVE.  
P.O. BOX 238  
STEVENSVILLE, MI 49127  
616-429-8285

From Page No. \_\_\_\_\_

In order to generate sourcing data (expression data) for ~~gene~~ patient I designed primers for the sourcing ~~SPD~~ genes. Seen on pgs 11

Wave

34436	✓	-H
39518	✓	
44176	✓	A
46777	✓	
35595	✓	
39976	✓	Wnt
44192	✓	Wnt
52722		
34392		
35917		
40592		
44804		
38113	✓	- Done
41234		
45410		

SPD:  
gene for  
patient

The primer made are on pgs 12-13.

Sathy ran PCR Rtns using the primers on pgs 12-13 to generate the Final Sourcing data for the patient group

Witnessed &amp; Understood by me, \_\_\_\_\_

Date

11/24/99

Initialed by \_\_\_\_\_

Recorded by \_\_\_\_\_

Date

To Page No. \_\_\_\_\_

<62377.f2>GTGCTGCCCCGTTTCAGTGTGA  
<62377.f2>GGCTGGAAGAGGTGCTGAGCTCCT  
<64966.f2>TCTGTAATGGCAGTTTGGAGGTGGTATCACAT  
<64966.r2>TAGGCACCAGACTAAGCTGATATTCATTTCCTG  
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356055

Project No.

Book No. 33720

FILE

om Page No.

<82302.f2 OLI25014>GTAGAGACAGGGTTTCATCATGTTGCTCATG  
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To Page No.

# Project

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<del>39518</del>	<del>34815</del>	
44176	35702	6 <sup>H</sup> 25 <sup>H</sup> 26 <sup>H</sup> 28 <sup>H</sup> 29 <sup>H</sup> 153 <sup>H</sup>
46777	39499	26 <sup>+</sup> 228 <sup>+</sup> 229 <sup>+</sup> 230 <sup>+</sup> [153, 227]
35595	35613	6 <sup>+</sup> 25 <sup>+</sup> 28 <sup>+</sup> [26, 29, 89, 90, 153]
39976	35595	[55, 153, 227, 228, 229, 230]
44192	35877	153 <sup>+</sup> , 227 <sup>+</sup> 230 <sup>+</sup> - [25, 228, 229]
✓52722	39633	25 <sup>++</sup> 227 <sup>++</sup> 228 <sup>+</sup> [26, 229, 230]
	52092	
34392	30876	6H 25H 26H 28H 29H [89-90] 153 <sup>M</sup>
✓35917	34415	
✓40592	34398	
44804	37162	228 <sup>+</sup> 230 <sup>+</sup> [25, 153, 227, 229]
✓38113	38110	
41234	36363	25 <sup>+</sup> 227 <sup>+</sup> 228 <sup>+</sup> 229 <sup>+</sup> 230 <sup>+</sup> [153]
45410	40654	26 <sup>++</sup> , 153 <sup>++</sup> 227 <sup>++</sup> 228 <sup>+</sup> 229 <sup>++</sup> 230 <sup>++</sup>

The Page 14-15 contain the sequencing data for  
 pairs that were cloned at GVE. For the order  
 clones I bothy used the primers on pg 12-13  
 to run PCR exp on 12 libraries. See his  
 notebook 32305 pg 59 for details



[d] = not expressed in this library

~~38243~~

39616 ✓ 26+ 55++ 153+ 227++ 229++ 231  
 45451 ✓ 98+ 153++ 227++ 229++ [55, 25]  
 46964 ✓ 25++ 55+- 98++ 153++ 228++ 229++  
 49807 ✓ 90+ 153+ 227++  
 9816 ✓ 26++ 227++ 229+- 254+-  
 7435 ✓ 26+- 255++ 228++  
 4187 ✓ 94++ [99, 154, 135, 294, 301, 26, 153, 227, 229, 231]  
 78722 ✓ 227+ 154+ 301+ 225+- 229+ 399+  
 17654 ✓ 301++ [227, 154, 255, 229, 399]  
 16621 ✓ 301++ 229+ [227, 255, 154, 368, 399, 294, 135]  
 30934 ✓ ~~6, 25, 90~~ 6++ 25++ 24++ 28++ 29++ 89+ 153  
 14813 ✓ 153+ 28+- [6, 25, 90]  
 -17637 ✓ 229+ 399++ [255, 301, 154, 227]  
 80202 ✓ 301+ [154, 227, 255, 247, 135]

12890

42537

40649

• 49665

67977

52162 ✓ 26+- 227+- 247++ [153, 229, 255]

43041

35718

34023

WPC-4  
71568/73675

↔ brain, but not in heart, placenta, lung, liver  
 skeletal muscle, kidney, pancreas, spleen, thymus  
 prostate, testis, ovary, small intestine, ~~ABL~~  
 colon - Published by Ines Pon

From Page No. \_\_\_\_\_

Project	Name	Date	Source
92238	76348 J. Stinson	12/98	Incyte Purch
92929	85030 James Pan	12/98	Purch
96786	expression		
85066	84664 A. Goddard	10/98	<u>Dep. Cl. other</u>
96787	84699 James Pan	12/98	Purch
92505	<del>92505</del> 86670 James Pan	11/98	Purch

Rg 16-18 contain notes used to determine which gels needed primers to be ordered. These notes were generated by Clur.

The ~~next~~ next page shows the sourcing data generated by Satmy using the primers & design on page 12-13. I sent this data to Carl Carpenter for purchase. To see the actual gel photos look in the sourcing book.

Witnessed &amp; Understood by me,

Date

12/24/98

Initialed by

Recorded by

Date

To Page No.

[illegible]

**User:grim**

**oli.out3\_6\_2000**

**Tue Jan 6 15:24:10 PST 2004**

**xe12380 / XE12380**

xe12380 User:grim Job: oli.out3\_6\_2000 Date: Tue Jan 6 15:24:10 PST 2004

xe12380 User:grim Job: oli.out3\_6\_2000 Date: Tue Jan 6 15:24:10 PST 2004

xe12380 User:grim Job: oli.out3\_6\_2000 Date: Tue Jan 6 15:24:10 PST 2004

xe12380 User:grim Job: oli.out3\_6\_2000 Date: Tue Jan 6 15:24:10 PST 2004

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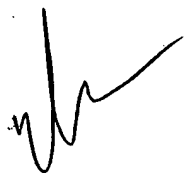


From: James Fitzgerald <jlfitz@gene.com>  
Date: Tue Jan 6, 2004 3:43:31 PM US/Pacific  
To: grim@gene.com  
Subject: oli.out3\_6\_2000

ala# ls -l ~grim/patent/oli.out3\_6\_2000  
-rw-r-- 1 grim Cellgen 6697 Mar 6 2000 /va/Cellgen/grim/patent/oli.out3\_6\_2000

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